[*DEVICE FOR* DRUG-DRUG INTERACTION TESTING SAMPLE PREPARATION]

Abstract of Disclosure

A method and device for the automated large scale preparation for testing of drug-drug interactions, particularly with determination of IC$_{50}$ and Ki, as a screening tool enhancement for determining viability of large numbers of compounds as drug candidates. Small samples of specific probe substrates and new compound inhibitors are automatically dispensed en masse into multi-welled reaction plates which are prefilled with thawed human microsomes, buffer and cofactor. The reaction plates are incubated and the reaction products are tested within degradation time limits, for initial biological determinations of relevant interaction effects of the compounds. The device used for the preparations comprises computer controlled multiple liquid handling cannulas, micropipetting members, refrigeration, freezer and temperature controlled incubator units, vacuum filtration device, bar code tracking of the plates, transport mechanisms for movement and manipulation of multiwell plates and sample mixing elements with co-ordinated timing of all operations within limited time frame testing parameters.

Figures